

REMARKS

Claims 19-21 and 28-30 have been rejected under 35 U.S.C. § 103 as being obvious over Wu et al. in view of Radamson et al. Applicants respectfully traverse this rejection. Claims 28-36 have been cancelled, without prejudice, to simplify the prosecution of this application.

Wu is cited as describing a device produced according to the method of claim 19, citing Fig. 1D and alleging that Wu places a p+ layer on the first side of the substrate having a boron content and a germanium content. However, Wu does not, as newly amended claims 19 recites, place a p+ layer on the surface of the substrate that forms an etch stop. Wu places a series of layers of silicon/germanium mixtures, beginning with 3% Ge and increasing to 30%. These layers only serve as an etch stop after about 18% Germanium is reached.

There is no teaching that would suggest attempting to use the first layers of Wu as etch stops and they do not function as an etch stop. If the Examiner so desires, Applicants will submit a declaration showing that the Wu layers of low Ge do not function as an etch stop. It is noted, in addition, that Wu states that solutions etch "any silicon containing less than $7 \times 10^{19} \text{ cm}^{-3}$ of boron or undoped $\text{Si}_{1-x}\text{Ge}_x$ alloys with x less than approximately 18. Thus the first five layers in Fig. 1D of Wu are not etch stops. Column 6, lines 62-65.

The Examiner has agreed that Wu does not specifically describe a strain compensated p+ layer. Applicants add that Wu does not teach or suggest a p+ layer on the substrate that functions as an etch stop.

To remedy this deficiency of the Wu reference, the Examiner has urged that Radamson states that "Ge concentration results in strain compensated layer, to produce devices having both low hall and drift mobilities." citing page 1397. Radamson is totally silent as to etch stops,, and is producing transistors and other electronic devices, and thus needs to be able to place the electronic components, such as capacitors, etc., directly on the SiGe layer. The p+ layer as claimed herein is conductive, and thus the claim calls for

a layer of insulation between the diaphragm formed by etching and the micromechanical structure components that make up the rest of the electronic component. Radamson does not teach or suggest that.

The combination of Wu and Radamson does not contain any teaching or suggestion that would lead one skilled in the art to take Wu's structure and modify it with anything taught in Radamson. Wu addresses the construction of microelectromechanical devices such as sensors. Radamson does not. Wu does not have a p+ layer and there is no suggestion in either reference that the problem solved by Applicants, namely forming micromechanical structures, can be accomplished as claimed herein. Reconsideration of the rejection and allowance of the claims is earnestly solicited.

As previously noted, the other references cited to show various micromechanical devices do not remedy the deficiencies of the combination of Wu and Radamson.

Finally, it is to be noted that the only time "alloy" is used above is in a direct quote from Wu. Reconsideration of the remarks page on page 8, lines 6, 7 and 8 from the bottom of that page is requested.

If the Examiner considers this case ready for conclusion, other than by allowance, he is respectfully requested to call Applicants' attorney at the number listed below. One of the inventors has indicated an interest in having a telephone interview with the Examiner and such action might move this case to conclusion.

DATE: April 4, 2006

Respectfully submitted,
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By their Attorney

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CERTIFICATE OF MAILING

I hereby certify that the attached correspondence is being deposited with the United States Postal Service and First Class Mail in an envelope addressed to: Mail stop non-fee amendment, Commissioner for Patents, PO Box 1450, Alexandria , VA 22313-1450, on the date appearing below.

DATE: April 4, 2006

Respectfully submitted,


John S. Munday